FY16 Heliophysics Science Performance Assessment (GPRAMA)

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NASA's 2014 Strategic Goals and Strategic Objectives

Strategic Goal 1

Expand the frontiers of knowledge, capability, and opportunity in space

By empowering the NASA community to...

Objective 1.1: Expand human presence into the solar system and to the surface of Mars to advance exploration, science, innovation, benefits to humanity, and international collaboration.

Objective 1.2: Conduct research on the International Space Station (ISS) to enable future space exploration, facilitate a commercial space economy, and advance the fundamental biological and physical sciences for the benefit of humanity.

Objective 1.3: Facilitate and utilize U.S. commercial capabilities to deliver cargo and crew to space.

Objective 1.4: Understand the Sun and its interactions with Earth and the solar system, including space weather.

Objective 1.5: Ascertain the content, origin, and evolution of the solar system and the potential for life elsewhere.

Objective 1.6: Discover how the universe works, explore how it began and evolved, and search for life on planets around other stars.

Objective 1.7: Transform NASA missions and advance the Nation's capabilities by maturing crosscutting and innovative space technologies.

Strategic Goal 2

Advance understanding of Earth and develop technologies to improve the quality of life on our home planet

By engaging our workforce and partners to...

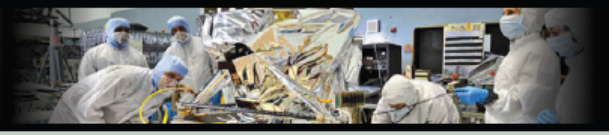
Objective 2.1: Enable a revolutionary transformation for safe and sustainable U.S. and global aviation by advancing aeronautics research.

Objective 2.2: Advance knowledge of Earth as a system to meet the challenges of environmental change, and to improve life on our planet.

Objective 2.3: Optimize Agency technology investments, foster open innovation, and facilitate technology infusion, ensuring the greatest national benefit.

Objective 2.4: Advance the Nation's STEM education and workforce pipeline by working collaboratively with other agencies to engage students, teachers, and faculty in NASA's missions and unique assets.

Strategic Goal 3



Serve the American public and accomplish our Mission by effectively managing our people, technical capabilities, and infrastructure

By working together to...

Objective 3.1: Attract and advance a highly skilled, competent, and diverse workforce, cultivate an innovative work environment, and provide the facilities, tools, and services needed to conduct NASA's missions.

Objective 3.2: Ensure the availability and continued advancement of strategic, technical, and programmatic capabilities to sustain NASA's Mission.

Objective 3.3: Provide secure, effective, and affordable information technologies and services that enable NASA's Mission.

Objective 3.4: Ensure effective management of NASA programs and operations to complete the mission safely and successfully.

NASA's 2014 Strategic Plan is available at:
http://www.nasa.gov/sites/default/files/files/FY2014_NASA_SP_508c.pdf.

Heliophysics FY16 Performance Goals

Strategic Goal 1:	Expand the frontiers of knowledge, capability, and opportunity in space
Objective 1.4	Understand the Sun and its interactions with Earth and the solar system, including space weather.
Performance Goal 1.4.1	Demonstrate progress in exploring the physical processes in the space environment from the Sun to Earth and throughout the solar system.
Performance Goal 1.4.2	Demonstrate progress in advancing understanding of the connections that link the Sun, Earth and planetary space environments, and the outer reaches of the solar system.
Performance Goal 1.4.3	Demonstrate progress in developing the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth.
Performance Goal 1.4.4	By December 2017, launch two missions in support of Strategic Objective 1.4.

Heliophysics FY16
Annual Performance Indicators (APIs)

Strategic Objective 1.4	Understand the sun and its interactions with earth and the solar system, including space weather.	
Multi-year Performance Goal 1.4.1	***Demonstrate progress in exploring the physical processes in the space environment from the Sun to Earth and throughout the solar system.***	**TBD**
API HE-16-1	Demonstrate planned progress in exploring the physical processes in the space environment from the Sun to Earth and throughout the solar system.	**TBD**
Multi-year Performance Goal 1.4.2	***Demonstrate progress in advancing understanding of the connections that link the Sun, Earth and planetary space environments, and the outer reaches of the solar system.***	**TBD**
API HE-16-2	Demonstrate planned progress in advancing understanding of the connections that link the Sun, Earth and planetary space environments, and the outer reaches of the solar system.	**TBD**
Multi-year Performance Goal 1.4.3	***Demonstrate progress in developing the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth.***	**TBD**
API HE-16-3	Demonstrate planned progress in developing the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth.	**TBD**

Heliophysics FY16
Annual Performance Indicators (cont.)

Strategic Objective 1.4	Understand the sun and its interactions with earth and the solar system, including space weather.	
Multi-year Performance Goal 1.4.4	***By December 2017, launch two missions in support of Strategic Objective 1.4.****	G
API HE-16-5	Complete Solar Probe Plus System Integration Review	G
API HE-16-6	Complete ICON System Integration Review	G
API HE-16-7	Release the next Heliophysics Explorer AO	G
API HE-16-8	Complete Solar Orbiter Collaboration Instrument Pre-Ship Reviews (SoloHI to be met; HIS delayed to Q1FY17)	Y

*To be met with launches of MMS and ICON.
Note: For reasons of year-to-year numbering consistency, there is no HE-16-4.

Annual Performance Report Process

- There are three Annual Performance Indicators in the NASA performance plan which the subcommittee is asked to assess progress:
  - API HE-16-1 Demonstrate planned progress in exploring the physical processes in the space environment from the Sun to Earth and throughout the solar system,
  - API HE-16-2 Demonstrate planned progress in advancing understanding of the connections that link the Sun, Earth and planetary space environments, and the outer reaches of the solar system.
  - API HE-16-3 Demonstrate planned progress in developing the knowledge and capability to detect and predict extreme conditions in space to protect life and society and to safeguard human and robotic explorers beyond Earth.

Annual Performance Report Process

- The subcommittee is tasked with making a high-level, subjective assessment of science performance and should base its evaluation on its general sense of progress as evidenced by key accomplishments and/or disappointments for each of the three objectives.
- SMD initiates this process by providing draft science accomplishments for each science objective. The subcommittee reviews these inputs and edits, adds, and/or deletes items, as desired.
- The subcommittee is asked to document its high-level assessment by assigning a color-coded rating for each objective and providing short explanatory text focused on example achievements (and/or shortfalls) upon which they based their assessment.

Guidelines for Science Progress Ratings

Color	Rating Definition
GREEN	Expectations for the research program fully met in context of resources invested.
YELLOW	Some notable or significant shortfalls, but some worthy scientific advancements achieved.
RED	Major disappointments or shortfalls in scientific outcomes, uncompensated by other unusually positive results.